

1/18

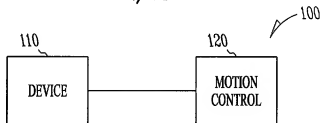


FIG. 1

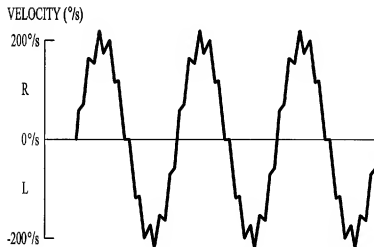


FIG. 2

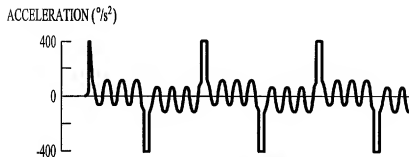


FIG. 3A

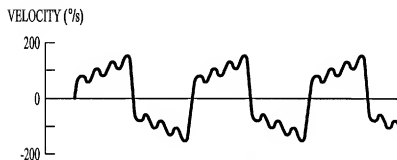


FIG. 3B

2/18

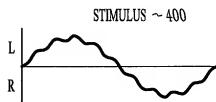


FIG. 4A

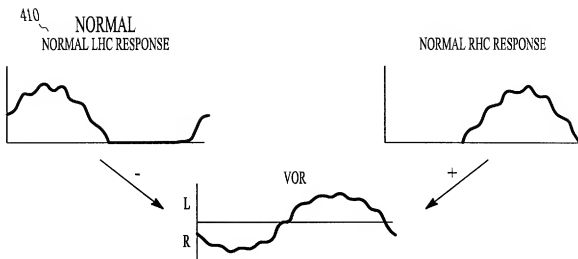


FIG. 4B

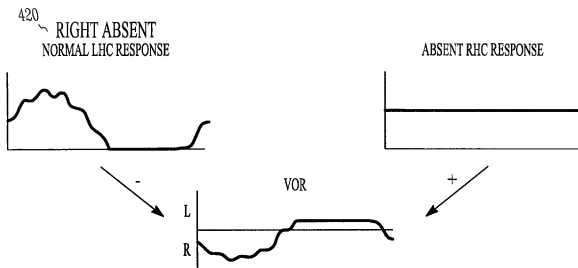


FIG. 4C

3/18

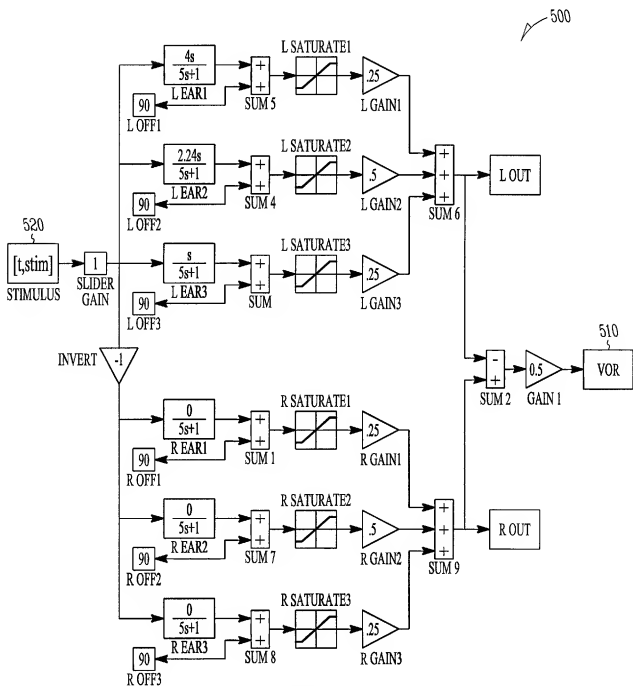
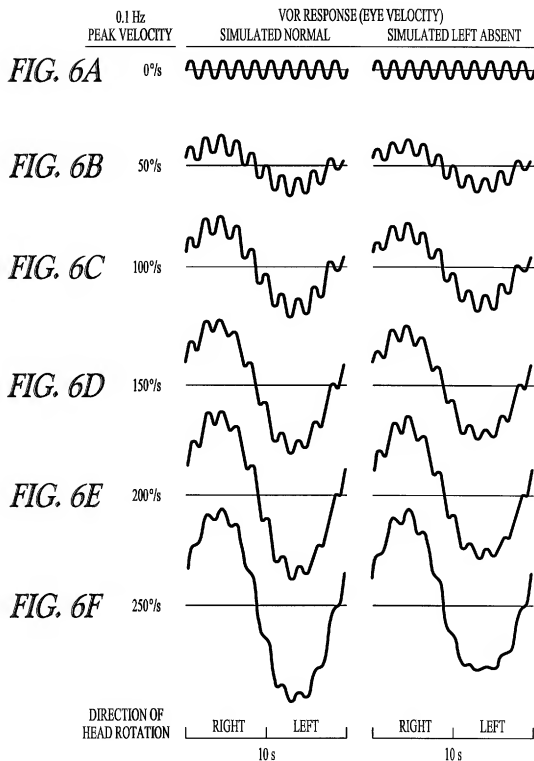
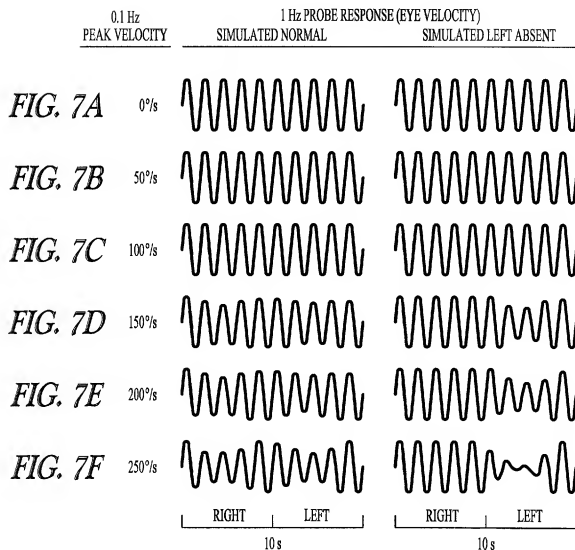


FIG. 5

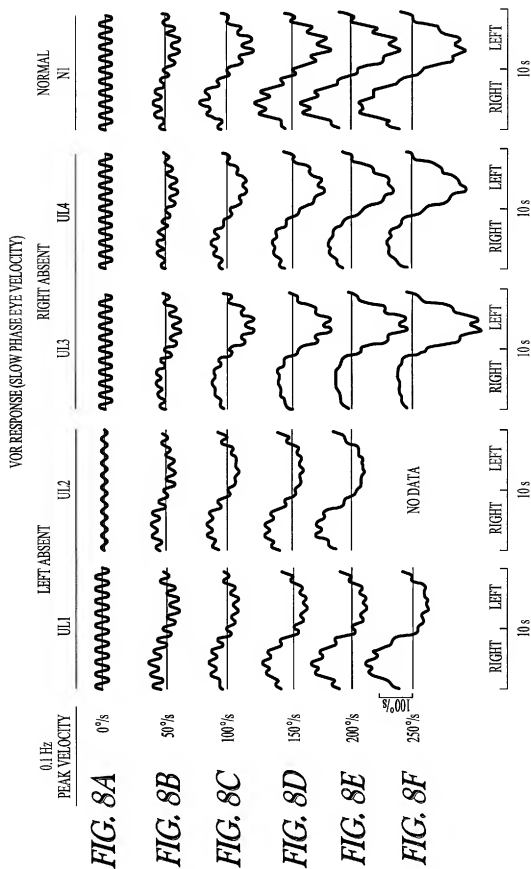
4/18



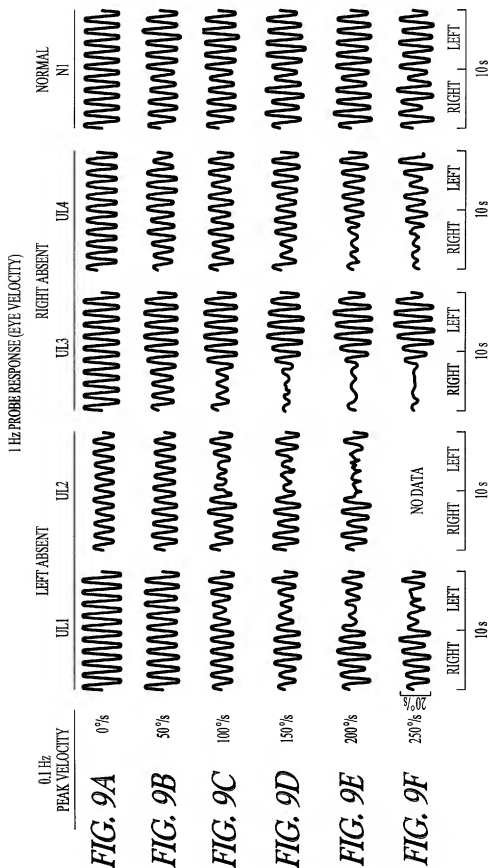
5/18



6/18



7/18



8/18

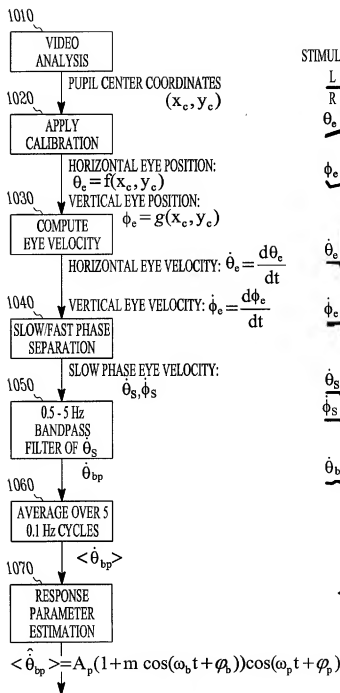


FIG. 10A

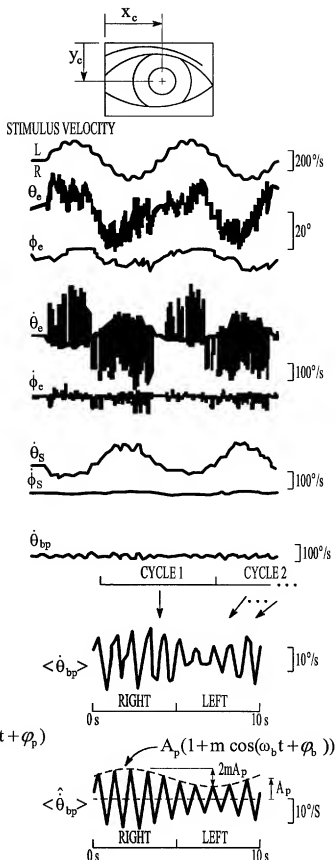


FIG. 10B

9/18

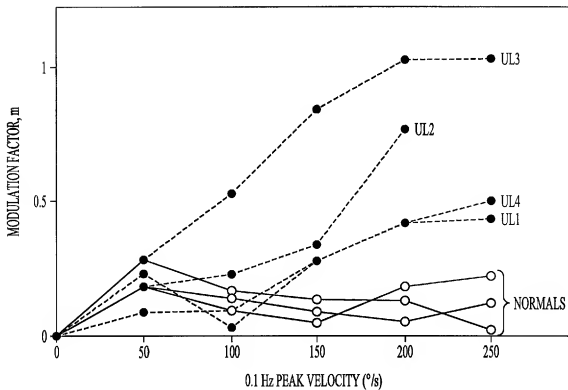


FIG. 11

10/18

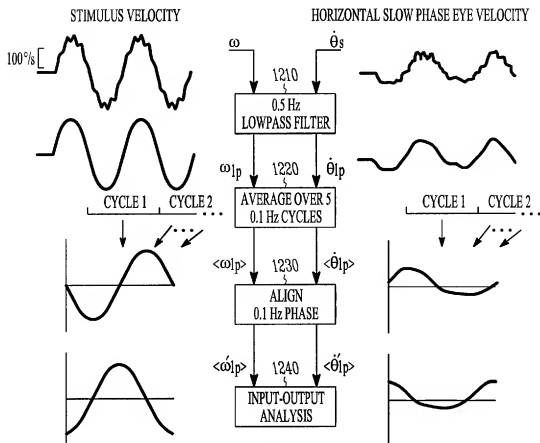


FIG. 12

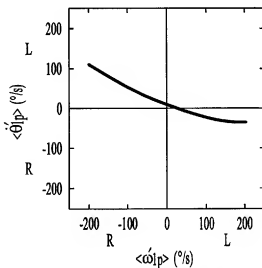


FIG. 13

11/18

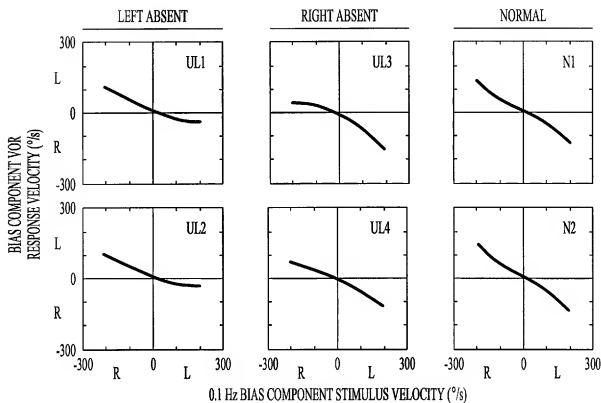
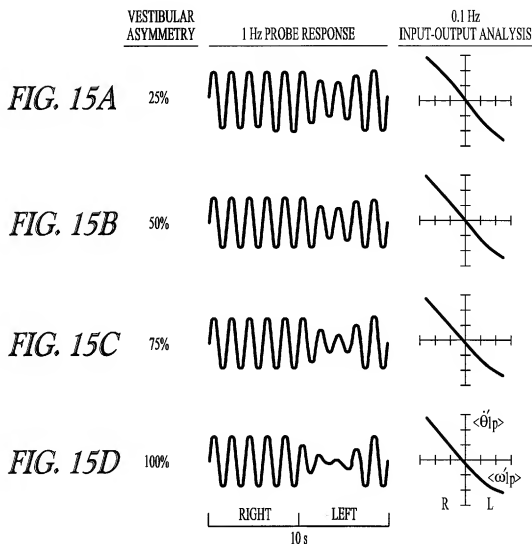


FIG. 14

12/18



13/18

PULSE-STEP-SINE (PSS) STIMULUS

FIG. 16A

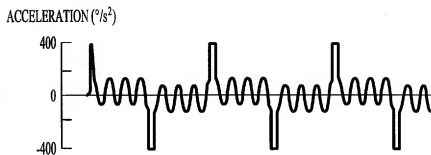


FIG. 16B

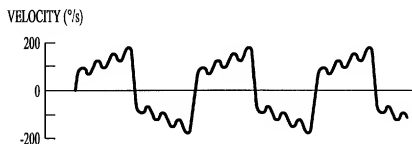
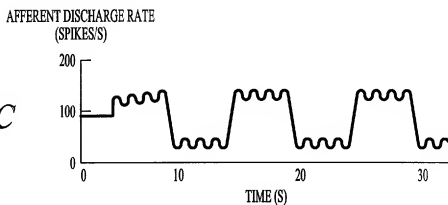
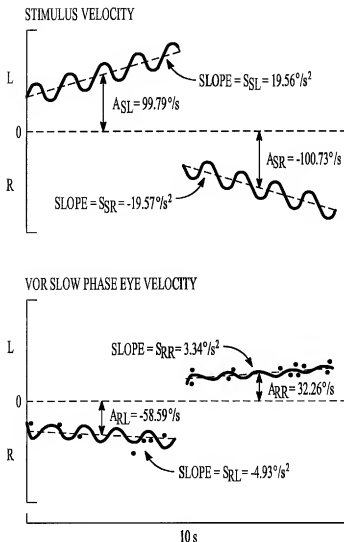


FIG. 16C



14/18

STEP COMPONENT MEASURES



$$\text{STEP ASYMMETRY} = \frac{\frac{A_{RL}}{A_{SL}} - \frac{A_{RR}}{A_{SR}}}{\frac{A_{RL}}{A_{SL}} + \frac{A_{RR}}{A_{SR}}} \times 100$$

(+) SIGN = DECREASED RESPONSE TO RIGHTWARD ROTATION

(-) SIGN = DECREASED RESPONSE TO LEFTWARD ROTATION

$$\text{MEAN RESPONSE SLOPE} = (S_{RR} - S_{RL})/2$$

MEAN SLOPE IS RELATED TO THE VOR TIME CONSTANT

SLOPE > 0: TIME CONSTANT > 5s

SLOPE = 0: TIME CONSTANT = 5s

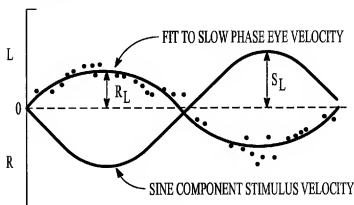
SLOPE < 0: TIME CONSTANT < 5s

FIG. 17A

15/18

SINE COMPONENT MEASURES

SINE RESPONSE DURING LEFTWARD STEP



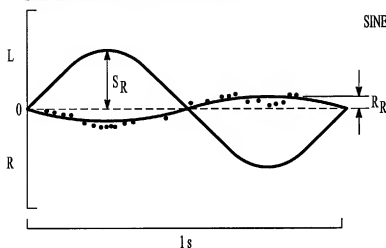
SINE COMPONENT GAIN DURING LEFTWARD STEP

$$VOR_R = \frac{R_L}{S_L}$$

SINE COMPONENT GAIN DURING RIGHTWARD STEP

$$VOR_R = \frac{R_R}{S_R}$$

SINE RESPONSE DURING RIGHTWARD STEP



SINE COMPONENT GAIN ASYMMETRY

$$= \frac{VOR_L - VOR_R}{VOR_L + VOR_R} \times 100$$

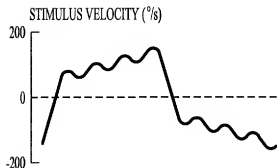
(+) SIGN = DECREASED RESPONSE
TO RIGHTWARD ROTATION

(-) SIGN = DECREASED RESPONSE
TO LEFTWARD ROTATION

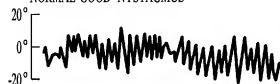
FIG. 17B

16/18

VOR (IN DARK)



NORMAL "GOOD" NYSTAGMUS



NORMAL "BAD" NYSTAGMUS



FIG. 18A

VOR (WITH FIXATION)

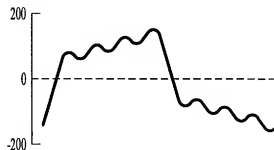
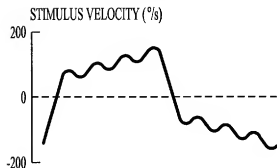


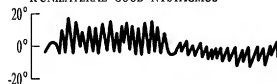
FIG. 18B

17/18

VOR (IN DARK)



R UNILATERAL "GOOD" NYSTAGMUS



L UNILATERAL "BAD" NYSTAGMUS



FIG. 19A

VOR (WITH FIXATION)

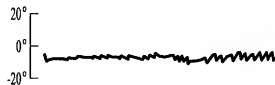
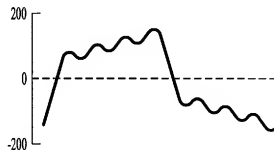


FIG. 19B

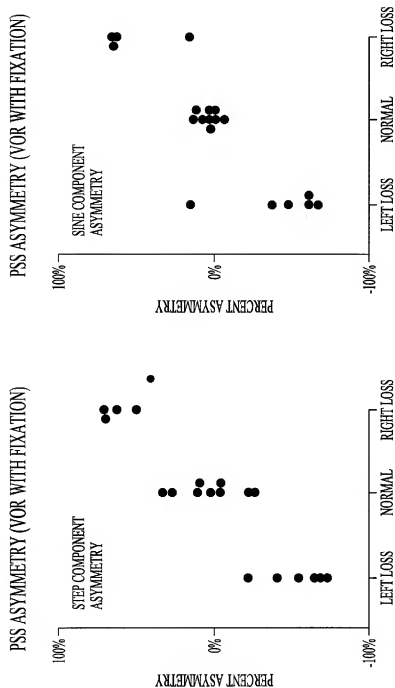


FIG. 20B

FIG. 20A